

Egyptian History &

Dr Immanuel Velikovsky was one of the twentieth century's great scholars. He sought to solve a mystery and in the process generated enormous controversy in the fields of archaeology, astronomy and cosmology. The attack by many members of the scientific community on his work, their attempts to intimidate his publisher and suppress his evidence have made Velikovsky the Galileo of our time.

The story starts in 1939. Then Dr Velikovsky, a practicing psychoanalyst who had studied with Freud, went to the US to research a book on three dominant figures of the ancient Mediterranean - Moses, Oedipus and Akhnaton. When he was nearly complete a question arose about the time of the Exodus of the Hebrews from Egypt. Although recorded in detail by the Hebrews there was no equivalent record in Egyptian history. Why?

Under the conventional chronology of Egyptian history, the time period usually considered for the Exodus causes problems. For many other events in Hebrew history there appear to be no Egyptian counterparts either - but these two nations existed beside each other for centuries, according to the Hebrews. Velikovsky's answer to this lack of correlation was to suggest that the accepted chronology of ancient Egypt was out by 500 years. He noted that our dating of Egyptian periods came from the dynastic records handed down by Ptolemy and Agrippa, and that the reigns of the Pharaohs - used to date Egyptian history - had been strung together one after another. The key to the 'missing' half millennium was that there were many 'co-regnal' periods where the reigns of monarchs overlapped or were indistinct. In his revised chronology many events in Hebrew history were found to have their counterpart in the Egyptian record.

The new chronology was built from the archaeological evidence found in the ruins of ancient Egypt. From remaining papyrus and pottery, tomb paintings and monuments a new story emerged. Because the histories of Greece, Assyria, Babylon and Judea were all dated from the dynastic records of Egypt, Velikovsky's work became highly controversial. In 1945 this was limited to a specialist field, but his next publication, in 1950 aroused widespread controversy.

Worlds in Collision was Velikovsky's explanation of the cause of this amnesia in our collective memory.

The Comet Venus

The ancient civilization of Egypt was nearly destroyed in a cosmic catastrophe that endangered the entire planet, according to Velikovsky. Everywhere, huge resources were devoted to study of the skies. It's widely known that ancient civilizations in Asia, the Americas, Europe and the Middle East were highly advanced in astronomy. While we accept this as a common feature of our past, why were so many people interested in the study of the movements of the planets? Why is the alignment of astronomical instruments found in Babylon

2.5 degrees out from the present alignment of the Earth? Why did calendars constructed between the middle of the second millennium BCE and 800 BCE have 360 days and months of thirty days? Why do even earlier calendars have days, months and years of different lengths again?

Velikovsky's answer was that the Earth and Mars had been involved in repeated near collisions with a gigantic comet since our recorded history began. The events described in the Exodus and in Egyptian papyri are a vivid description of an age in chaos - plagues, turmoil and darkness, and the flight of the Hebrews from Egypt toward a 'column of fire' in Sinai.

The Earth was momentarily slowed down and its axis slightly altered as the comet passed by. Electrostatic forces caused discharges to arc between the Earth and the comet, turning the skies to fire and the forests to flame. The crust was rent, volcanoes erupted, earthquakes rocked and darkness enveloped the world - the time of the Exodus. 700 hundred years later Isaiah, Joel and Amos described another series of upheavals; the Sun appeared to stand still in the sky. Although slightly dislodged from its axis and orbit again, the Earth fared better this second time. These were, in fact, the last two acts of a cosmic drama; the earliest act of which we have records is called The Deluge.

"All cosmological theories assumed that the planets have evolved in their places for billions of years... Venus - was formerly a comet and joined the family of planets within the memory of mankind... We claim that the Earth's orbit changed more than once, and with it the length of the year; that the geographic position of the terrestrial axis and its astronomical direction changed repeatedly and that at a recent date the polar star was in the constellation of the Great Bear." - *Worlds In Collision*, p. 361

Velikovsky believed that the origin of the comet that was responsible for changes in the Earth's orbit was in the proto-star we know as Jupiter. This idea outraged the scientific community. But his theories about the natures of Jupiter and Venus have not yet been proven wrong. He said that because Venus was younger than the other planets, its surface temperature would be much hotter and its atmosphere denser than astronomers believed; these predictions were proven correct.

Cosmic Catastrophe

He predicted Venus would be found to have orbital anomalies in relation to the other planets; Venus has since been found to rotate on its axis in reverse direction to the other planets, and its day is longer than its year. We now know that parts of the atmosphere of Venus rotate in 4 days (with winds of up to 400km/h) while the planet itself rotates in 243 days. Both these rotations are retrograde. One of Velikovsky's hypotheses for the slowing of the Earth's rotation which made the Sun appear to stand still was that the planet was engulfed in the extended atmosphere of the comet Venus. Some of the diurnal rotation of the Earth was imparted to this dust-cloud according to Velikovsky, which fits the eccentric characteristics of the Venusian atmosphere.

The comet spiraled past the Earth in an ever-decreasing path around the Sun before taking up its present orbit as the planet Venus. He further cites evidence to show that the Earth interacted with Mars on a number of occasions when writing was better developed than during the Venusian encounters, after Venus flipped Mars out of its orbit. Disturbances caused by the passages of Mars consisted of earthquakes and electrical discharges. Most of the 'Mars events' took place within a 90 year period. This may sound far-fetched, but Velikovsky's evidence and the predictions he made from it have stood the test of nearly four decades of investigation. As in his previous work, Velikovsky amassed an impressive range of evidence to support his case.

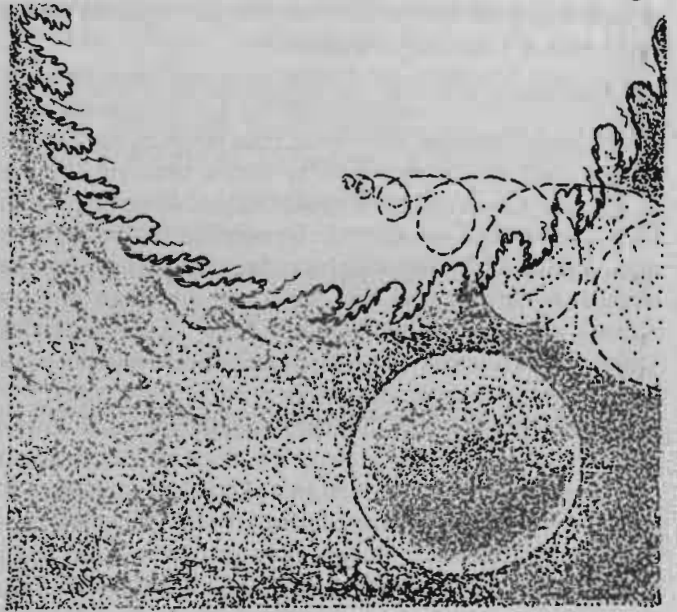
Mythic Keys

To support his interpretation of the Hebrew and Egyptian histories Velikovsky searched the records of the civilisations of the eighth and fifteenth centuries BCE. In his last book he described his many years of research as sitting at the feet of sages "to listen to those who lived close to the events of the past ... I realised very soon that the ancient sages lived in a frightened state of mind". What became quickly apparent was the similarity of the events these peoples had experienced, and the fear that global upheavals associated with planetary encounters had inspired.

The legends of the past are folklore, but the similarity of motifs from five continents and Pacific Ocean islands is striking; witches on brooms, the dragon and the scorpion, an animal with many heads and winged body, a woman whose veils stream behind her - these images are universal cosmic myths recording the characteristic shapes possessed by comets.

Velikovsky tracks the motif of the sun being trapped in its movement through the tales of the Polynesians, Hawaiians and North American Indians. Like the Middle-East civilisations, they have the story of the sun being snared and freed by a

The Ideas of Velikovsky



mouse. In the Hawaiian version Maui caught and beat the sun, which begged for mercy and promised to go more slowly ever after. At the same time new islands appeared. The Ute Indians tell of a piece of sun setting fire to the world, which was broken off by a rabbit after the sun rose, went down and rose again.

The legend of the cosmic battle of the planetary gods is familiar to us all. In the Homeric epics the Greeks choose Athene/Venus for their protector, the Trojans Ares/Mars. A similar situation existed in ancient Mexico. The Toltecs worshipped Quetzal-cohuatl/Venus, but the later Aztecs revered Huitzilopachtli/Mars. The identity, conflict and features of the planetary gods are consistent across the ancient world.

Chinese chronicles record two suns doing battle in the sky and the disturbance of the other planets this caused. Mars was pursued by Venus, the Earth shook, glowing mountains collapsed, "the customs of the age are thrown into disorder ... all living beings harass one another". An old textbook of Hindu astronomy has a chapter on planetary conjunctions. A planet can be struck down or utterly vanquished, and the victor in these encounters is usually the planet Venus. A juncture of the planets is called a *yuga* in Hindu astronomy; the ages of the world are also called *yugas*.

An association for the planet Mars with the wolf is also common. In Babylon one of the seven names of Mars was wolf. An Egyptian god with the head of a wolf prowled the land. The Romans used the wolf as the animal symbol for Mars. Slavic mythology has a god in the shape of a wolf, Vukadlak, who devoured the Sun and Moon. In the Icelandic epic the Edda, the god that darkens the Sun is the wolf Fenris, who battled the serpent Midgard in the heavens above. A Chinese astronomical chart quotes ancient sources in saying "once Venus ran into the Wolf-Star".

Nature's Evidence

In *Earth in Upheaval*, Velikovsky excluded all references to ancient literature, traditions and folklore;

"This I have done with intent, so that careless critics cannot decry the entire work as tales and legends. Stones and bones are the only witnesses."

All over the coast of Alaska there are great heaps of smashed bones of extinct animals mingled with uprooted trees and the occasional flint spearhead. Four layers of volcanic ash can be found in these remains of splintered trees and dismembered bodies. In the polar regions of Siberia and on the Arctic islands there are hills of broken wood piled hundreds of feet high, and beyond them hills of mammoth bones cemented together by frozen sand. On one island the bones of these animals were found with fossilised trees, leaves and cones. When the mammoth lived in Siberia there was abundant vegetation.

Spitsbergen is nearly 79 degrees north; yet fossil flowers and corals and beds of coal thirty feet thick have been found. Antarctica is known to have seams of coal at a latitude of 85 degrees. For this coal to have formed, the polar regions must have had great forests in the past. How can relatively recent and sudden changes in the Earth's climate and simultaneous widespread destruction of plant and animal species be explained?

The violence of this destruction can be seen across Western Europe where every major rock fissure is filled with the bones of animals, splintered and smashed into fragments. One

1,400ft hill in France is capped by the remains of mammoths, reindeer, horses and other animals. America has beds of fossil bones containing 100 bones per square foot, deposited in sand. Some of these are over 200 ft high. The hills of the Himalayas and Burma contain similar beds of bones. In China, among these fractured bones, the skeletons of seven humans were found. European, Melanesian and Eskimo types were lying together. Extinct and extant species of animals have been found mixed together in English deposits.

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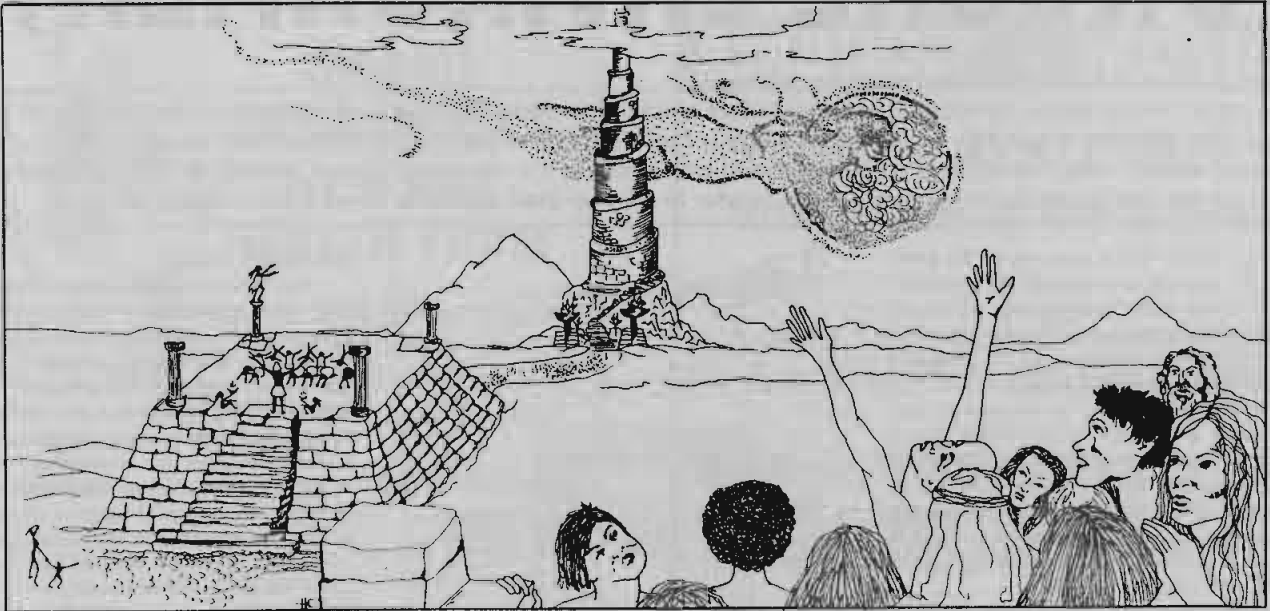
The conventional theory of slow and uniform geological processes cannot explain these deposits - instead, they are evidence of major catastrophes which have struck the planet. Velikovsky suggests a giant tidal wave which engulfed the world that picked up and carried plants and animals over a great distance and smashed them intermingled into common graves. This and the transformation of the Earth's climate are explained as consequences of the rapid change of the Earth's axis brought about by a near-collision with another planet.

The geological record tells a similar compelling story to that which paleontologists have unearthed. At 1,400 ft (400 metres) altitude in the Andes there are high water surf marks lined with undecayed seashells. There are many ruins surrounded by terraces for cultivation on the dry West side of the Andes. On the East side, terraces continue far past the permanent snowline. Before the last lava sheet spread over Columbia there were human settlements there, the remains of which have been found. That the Andes mountains were raised in fairly recent times by unimaginable forces is one conclusion.

The ocean floor around the globe also bears witness to flows of lava and volcanic ash which covered a violently shifting bedrock while tidal waves battered the continents. There were once dry land and beaches in many places where the Atlantic Ocean now lies. The bottom of the seas show that the Earth has been showered with meteorites on a very large scale, leaving clay deposits rich in nickel, radium and iron.

When the Earth's axis was shifted by the interaction of the Earth's and the planet's magnetic fields, magnetic eddy currents formed in the atmosphere. These generated great heat and melted rocks on the surface. As this rock cooled, it reformed with a different magnetic polarity to surrounding strata. All over the world, similar local rock formations are found with their magnetic polarisation reversed. For this to be the case the Earth's magnetic field must have been reversed when these rocks were formed. Also, rocks with this inverted polarity are far more strongly magnetised than the Earth's magnetic field alone can account for.

Why was volcanic activity so common in the recent past? How was the sea floor raised and lowered around the world? As the Earth's axis shifted in earlier times, the inertia of air and water caused hurricanes and tidal waves; the stress on the planet caused vulcanism and an outpouring of magma, sending up clouds of volcanic ash that threw a cloak of darkness over a sunless world.



The heat generated by these forces evaporated seas. In some places torrential downpours formed great streams running through recently opened fissures in the Earth's crust which suddenly eroded the landscape. Elsewhere, snow fell and covered the land with continental ice sheets. At the poles, a permanent snowcover grew as the land cooled.

Climatic changes, ice cover, mountain building and the reverse magnetic orientation of rocks are explained by Velikovsky's theory of cosmic catastrophe. However, the accepted view of the Earth's geological history is known as *uniformitarianism*; where the gradual workings of natural forces has produced the world as we know it. Needless to say, Velikovsky aroused as great a controversy in geology as he had previously in archaeology and astronomy. The defenders of uniformitarianism disliked Velikovsky's ideas at least as much as their fellow scientists had.

Velikovsky Attacked

Publication of *Worlds in Collision* caused a violent reaction; astronomers everywhere denounced and decried the book. They threatened to blackban Macmillan, the publisher, who was forced to withdraw the book from circulation. Under pressure, Macmillan transferred publication rights to Doubleday, who did not have a textbook department and burned their unsold copies.

In reviews in reputable journals and public statements, academics and scientists even criticised some of Velikovsky's works before anyone had read the manuscript. Conferences were held to show Velikovsky's theories were wrong.

Velikovsky died on November 17th 1979 at the age of 84. As more is learned about our solar system, some scientists have

realised that his theories might conflict with accepted ideas, but not actually conflict with the facts.

Rising From Amnesia

Velikovsky theorised that humanity suffered a collective amnesia on the subject of catastrophes. As a reaction to the repeated near-destruction of human civilization, a deep scar has been left on the human psyche. Although the solar system has been settled for 2,700 years, he notes a 700 year cycle in the human collective consciousness. Christianity in the 1st Century AD and Islam in the 7th were both founded on apocalyptic visions of the transformation of the world by fire. The 14th Century was the time of the Black Death and the Hundred Years War which reduced the population of Western Europe by two-thirds.

Velikovsky's fear was that in the 21st Century this trauma would be re-enacted by humanity, who is now in possession of the means of its own destruction.

An examination of the facts may help the recall of our racial memory, the suppression of which could be the cause of great violence in our history ★

The Books of Velikovsky

<i>Worlds in Collision</i>	©1950
<i>Ages in Chaos</i>	©1952
<i>Earth in Upheaval</i>	©1955
<i>Oedipus and Akhnaton</i>	©1960
<i>Peoples of the Sea</i>	©1977
<i>Ramses II and His Time</i>	©1978
<i>Mankind in Amnesia</i>	©1982

- Gerard